

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A display device comprising:

a light transmitting member comprising a first surface provided with depressions and a second surface;

a light source that irradiates the first surface of said light transmitting member with light; and

a control mechanism configured to switch between total reflection and transmission a behavior of the light, incident into said light transmitting member from said light source, at an interface between said light transmitting member and an external region adjacent to the second surface of said light transmitting member,

wherein said display device is configured to cause at least a portion of the light emitted by said light source and irradiating said light transmitting member to be output as a light component having directivity from said light transmitting member onto a scattering surface without being scattered, said scattering surface is spaced apart from said light transmitting member and said control mechanism, and said light component is used to display images.

Claim 2 (Previously Presented): A device according to claim 1, wherein said control mechanism is configured to change a refractive index of said external region.

Claim 3 (Previously Presented): A device according to claim 1, wherein said control mechanism comprises a transparent member opposing the second surface of said light transmitting member and a moving mechanism configured to change the state of said

transparent member with respect to said light transmitting member between a contact state and a separated state.

Claim 4 (Previously Presented): A device according to claim 3, wherein said transparent member has elasticity, and
said moving mechanism is configured to change a contact area between said transparent member and said light transmitting member in the contact state by deforming said transparent member.

Claim 5 (Original): A device according to claim 1, wherein images are displayed by using an intensity change of light transmitted through said interface.

Claim 6 (Original): A device according to claim 1, wherein images are displayed by using an intensity change of light totally reflected by said interface.

Claim 7 (Previously Presented): A device according to claim 1, further comprising the scattering surface that scatters the light component output from said light transmitting member.

Claim 8 (Previously Presented): A display device comprising:
a light transmitting member comprising a first surface provided with depressions and a second surface;
a light source that irradiates the first surface of said light transmitting member with light; and
a plurality of control mechanisms arrayed on said light transmitting member and

configured to switch between total reflection and transmission a behavior of light, incident into said light transmitting member from said light source, at an interface between said light transmitting member and an external region adjacent to the second surface of said light transmitting member,

wherein said display device is configured to cause at least a portion of the light emitted by said light source and irradiating said light transmitting member to be output as a light component having directivity from said light transmitting member onto a scattering surface without being scattered, said scattering surface is spaced apart from said light transmitting member and said control mechanism, and said light component is used to display images.

Claim 9 (Previously Presented): A device according to claim 8, wherein each of said control mechanisms is configured to change a refractive index of said external region.

Claim 10 (Previously Presented): A device according to claim 8, wherein each of said control mechanisms comprises a transparent member opposing the second surface of said light transmitting member and a moving mechanism configured to change the state of said transparent member with respect to said light transmitting member between a contact state and a separated state.

Claim 11 (Previously Presented): A device according to claim 10, wherein said transparent member has elasticity, and
said moving mechanism is configured to change a contact area between said transparent member and said light transmitting member in the contact state by deforming said transparent member.

Claim 12 (Original): A device according to claim 8, wherein images are displayed by using an intensity change of light transmitted through said interface.

Claim 13 (Original): A device according to claim 8, wherein images are displayed by using an intensity change of light totally reflected by said interface.

Claim 14 (Previously Presented): A device according to claim 8, further comprising the scattering surface that scatters the light component output from said light transmitting member.

Claim 15 (Currently Amended): A display device comprising:
a light transmitting member comprising first and second surfaces;
a light transmitting material;
a light source that irradiates the first surface of said light transmitting member with light; and

a control mechanism configured to change a contact state of said light transmitting material with respect to the second surface of said light transmitting member on an optical path of the light,

wherein said display device is configured to cause at least a portion of the light emitted by said light source and irradiating said light transmitting member to be output as a light component having directivity from said light transmitting member onto a scattering surface without being scattered, said scattering surface is spaced apart from said light transmitting member and said control mechanism, and said light component is used to display images, and

wherein the control mechanism is capable of changing a value of a contact area, in which the light transmitting material is in contact with the second surface of the light transmitting member, among at least three values according to a grayscale image to be displayed.

Claim 16 (Canceled).

Claim 17 (Original): A device according to claim 15, wherein said light transmitting material is a solid.

Claim 18 (Original): A device according to claim 17, wherein said light transmitting material is an elastic material.

Claim 19 (Previously Presented): A device according to claim 15, wherein images are displayed by using an intensity change of light transmitted through the second surface.

Claim 20 (Previously Presented): A device according to claim 15, wherein images are displayed by using an intensity change of light reflected by the second surface.

Claim 21 (Previously Presented): A device according to claim 15, further comprising the scattering surface that scatters the light component output from said light transmitting member.

Claim 22 (Currently Amended): A display device comprising:
a light transmitting member comprising first and second surfaces;

a light transmitting material;

a light source that irradiates the first surface of said light transmitting member with light; and

a plurality of control mechanisms arrayed on said light transmitting member and each configured to change a contact state of said light transmitting material with respect to the second surface of said light transmitting member on an optical path of the light,

wherein said display device is configured to cause at least a portion of the light emitted by said light source and irradiating said light transmitting member to be output as a light component having directivity from said light transmitting member onto a scattering surface without being scattered, said scattering surface is spaced apart from said light transmitting member and said control mechanism, and said light component is used to display images, and

wherein each of the control mechanisms is capable of changing a value of a contact area, in which the light transmitting material is in contact with the second surface of the light transmitting member, among at least three values according to a grayscale image to be displayed.

Claim 23 (Canceled).

Claim 24 (Original): A device according to claim 22, wherein said light transmitting material is a solid.

Claim 25 (Previously Presented): A device according to claim 23 24, wherein said light transmitting material is an elastic material.

Claim 26 (Previously Presented): A device according to claim 22, wherein images are displayed by using an intensity change of light transmitted through the second surface.

Claim 27 (Previously Presented): A device according to claim 22, wherein images are displayed by using an intensity change of light reflected by the second surface.

Claim 28 (Previously Presented): A device according to claim 22, further comprising the scattering surface that scatters the light component output from said light transmitting member.

Claims 29-48 (Canceled).

Claim 49 (Previously Presented): A display method comprising irradiating a light transmitting member that comprises a first surface provided with depressions and a second surface with light from a light source and switching between total reflection and transmission a behavior of light, incident into the light transmitting member from the light source, at an interface between said light transmitting member and an external region adjacent to the second surface of said light transmitting member by a control mechanism,

wherein one of light transmitted through said interface and light totally reflected by said interface is output as a light component having directivity from said light transmitting member onto a scattering surface without being scattered, said scattering surface is spaced apart from said light transmitting member and said control mechanism, and said light component is used to display images, and

wherein irradiating the light transmitting member with light comprises irradiating the first surface of the light transmitting member with light.

Claim 50 (Currently Amended): A display method comprising irradiating a light transmitting member that comprises first and second surfaces with light from a light source and changing a contact state of a light transmitting material with respect to the second surface of said light transmitting member on an optical path of the light,

wherein at least a portion of the light incident into said light transmitting member from said light source is output as a light component having directivity from said light transmitting member onto a scattering surface without being scattered, said scattering surface is spaced apart from said light transmitting member and said control mechanism, and said light component is used to display images,

wherein irradiating the light transmitting member with light comprises irradiating the first surface of the light transmitting member with light, and

wherein changing the contact state comprises changing a value of a contact area, in which the light transmitting material is in contact with the second surface of the light transmitting member, among at least three values according to a grayscale image to be displayed.

Claims 51-52 (Canceled).

Claim 53 (Previously Presented): A device according to claim 1, wherein each of the depressions has a V-shaped section.

Claim 54 (Previously Presented): A device according to claim 1, wherein the depressions form a triangular wave-like structure on the first surface.

Claim 55 (Previously Presented): A device according to claim 8, wherein each of the depressions has a V-shaped section.

Claim 56 (Previously Presented): A device according to claim 8, wherein the depressions form a triangular wave-like structure on the first surface.

Claim 57 (Previously Presented): A device according to claim 15, wherein the light transmitting material is a plate-like transparent elastic member, and the device further comprises a cantilever disposed on the light transmitting member and supporting one end of the elastic member.

Claim 58 (Currently Amended): A device according to claim 15, wherein the light transmitting material is an elastic member which comprises a ~~third~~ surface facing the second surface and provided with tapered projections.

Claim 59 (Previously Presented): A device according to claim 58, further comprising a beam disposed on the light transmitting member and supporting a periphery of the elastic member.

Claim 60 (Previously Presented): A device according to claim 15, wherein the first surface is provided with depressions.

Claim 61 (Previously Presented): A device according to claim 22, wherein the light transmitting material is a plurality of plate-like transparent elastic members, and the device further comprises cantilevers disposed on the light transmitting member and each supporting

one end of the elastic member.

Claim 62 (Currently Amended): A device according to claim 22, wherein the light transmitting material is a plurality of elastic members each of which comprises a third surface facing the second surface and provided with tapered projections.

Claim 63 (Previously Presented): A device according to claim 62, further comprising beams disposed on the light transmitting member and each supporting a periphery of the elastic member.

Claim 64 (Previously Presented): A device according to claim 22, wherein the first surface is provided with depressions.